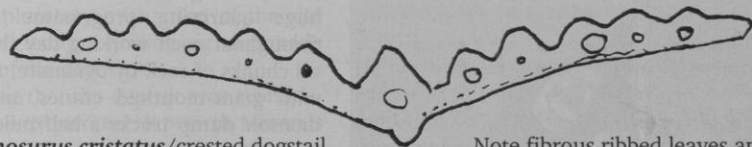


IDENTIFICATION

CROSS SECTIONS OF LEAVES



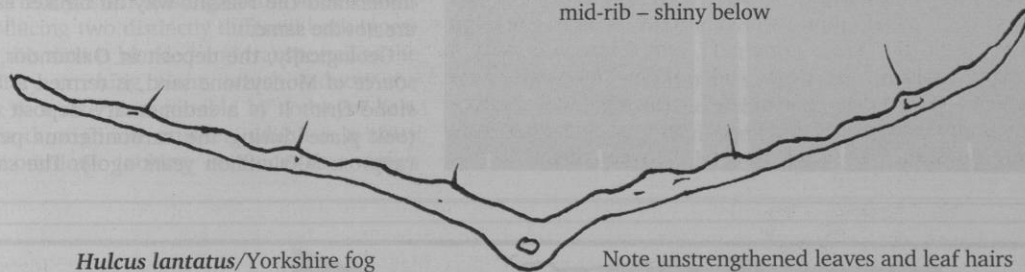
Cynosurus cristatus/crested dogstail

Note fibrous ribbed leaves and pronounced keel – shiny green below



Lolium perenne/Perennial ryegrass

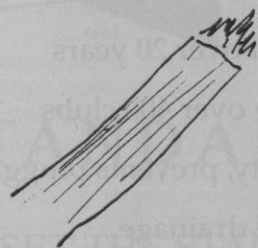
Note similar fibrous leaves and pronounced mid-rib – shiny below



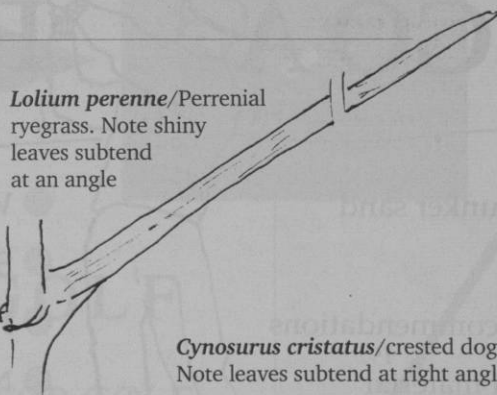
Hulcus lantatus/Yorkshire fog

Note unstrengthened leaves and leaf hairs

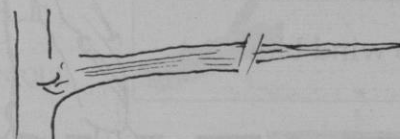
LEAVES



Lolium perenne/Perennial ryegrass
Note fibrous leaves stripped, not cut cleanly



Lolium perenne/Perennial ryegrass. Note shiny leaves subtend at an angle



Cynosurus cristatus/crested dogstail.
Note leaves subtend at right angles

viviparous fescue (*F. vivipara*) found on northern moorlands produces small spikelets, not seeds, and these drop off and grow when weather conditions are more favourable.

Another trap for the unwary is toad rush (*Juncus bufonis*) which occurs under wet conditions e.g. on thatchy greens, growing happily under the blades of the mower. It has fine, solid, not folded, cylindrical leaves and seriously affects putting surfaces

because of its slightly tussocky growth. Luckily, it can be sprayed out with full strength selectives, if caught early when it is growing and before it seeds.

Field woodrush (*Luzula campestris*) is perhaps less frequently seen, especially as today's closer mowing and regular verticutting, let alone grooming, will control it, but its very hairy, broad, tapering, brown-tinged leaves distinguish it fairly easily from grasses.

Sheep fescue deserves a mention – again very rarely found on greens but quite common on some thin acid approaches. Unlike creeping red fescues, it grows as individual plants – a whorled not a creeping habit – and so produces a thin open turf, not acceptable by today's standards.

We might also mention tip shooting of *Agrostis* – under wet conditions (often it is an early indication of over-watering),

small individual plantlets are produced, probably as an alternative to trying to produce seed heads. These can be easily detached from the parent plant – and easily verticut out when small – but the spotted effect is as bad for appearance as it is for putting.

It is to be hoped that while all greenkeepers should know their basic grasses, some may be enthused enough to go grass hunting – at least the plants stay still to aid identification (which is more than one can say for rare birds).

It is worth noting however that there are very few natural monocultural stands i.e. single species, as opposed to sown turf – and even if you start with only one or two species, others soon come in. So long as they have comparable growth habits to our native fine fescues and bents, this does not really matter. Perhaps one could 'age' golf greens in the same way as one can estimate the age of a hedge, one species for every hundred years approximately, according to one authority. Certainly some years ago when I carried out a botanical survey of the Old Course greens at St. Andrews, I identified no less than seventeen different species or sub-species. Of course, management, good as well as bad, can encourage some and kill off others, and there is something to be said for not having all your eggs in one basket!

The situation is quite different where grass is grown 'artificially' – e.g. hydroponically-fed, sand-only greens in very hot arid climates – where nature has no say and ultra-severe climatic conditions restrain weed grasses (but not diseases!) from invading. Not much *Poa annua* in the Arizona desert! Here, whatever man proposes, the weather has the last word – shared perhaps with the golfer who is putting fine turf under extreme stress all the year round and often pushing desirable species up to and beyond their capacity to withstand the effects of constant traffic and constantly changing weather. It is no coincidence that in nature, without help from man, the first stage in such stressful conditions is for *Poa annua* to replace bents and fescues (e.g. on paths) and then for it to be scrubbed off, leaving bare ground.



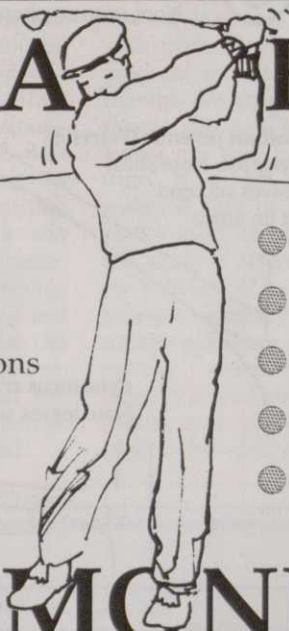
DAVID WHITE discovers that sand for the golf course doesn't just 'happen' – and like everything else, you tend to get what you pay for

To the layman it appears as though taken directly from a futuristic movie, a setting perhaps from '2001 – A Space Odyssey'. Deep in the Staffordshire countryside, sheltered far from public gaze yet throbbing with activity, a huge quarrying programme is underway throughout each working day, blasting colossal chunks of rock by dynamite, the rock lifted with giant-mouthed cranes and hauled by monster dump trucks a half mile or so to the Moneystone Quarry processing plant, there in a matter of hours to be transformed into pure, near white, luscious and carefully graded silica sand for use specifically on golf courses.

I'd seen sand dug from open seams or dunes, indeed had always believed that sand just 'happened' naturally and came in its finished state with nothing more than washing, sifting and grading demanded before meeting its final destination – in bunkers or as top-dressing. Now I was in for a lesson in geology, for by understanding the process I would understand the reasons why all bunker sands are not the same.

Geologically, the deposit at Oakamoor, the source of Moneystone sand, is termed a 'Millstone Grit'. It is a sedimentary deposit that took place during the carboniferous period (approx. 300 million years ago!). The sandy

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A lesson in geology

deposit consolidated into a rock and eventually, through land movement and upheaval, the deposit 'resurfaced' at its present location.

Once the whereabouts of the deposit was determined (outcrops of rock provided the evidence) an exploratory evaluation of the site was performed using a drilling rig to provide core samples of the deposit.

After proving that the deposit was economically viable for extraction, Hepworth Minerals applied for planning permission, it was granted, and the plant was built in 1960.

How then do lumps of rock the size of a motor car come to be transformed into closely graded particles that resist compaction regardless of heavy feet, particles that are less likely to be blown away in windy conditions than fine sand? To begin, the overburden or topsoil is removed to expose the red sandstone deposit. Blasting then takes place to establish the quarry face, followed by continuous explosions which provide the rock feed to the plant.

Currently, such blasting occurs at two levels (producing two distinctly different rock types) and this then is blended and transported to the primary crushing plant, which reduces the rock to a size transportable by conveyor belt. Once through the crusher, which is a noisy and ominous looking machine that defies

description, the rock is conveyed to a stockpile. It is then fed at a constant rate to a secondary crushing and washing plant where further size reduction takes place.

Attrition (grinding down by friction), followed by washing with water are processes used to remove the clay, silt and fine sand. Heavy mineral residues (e.g. chromite) are extracted by centrifugal action and the remaining classified sand is de-watered before progressing to a hot acid leaching plant. This hot acid process removes the surface iron (the rock begins life with a reddish brown tint) and the sand takes on its familiar white colour.

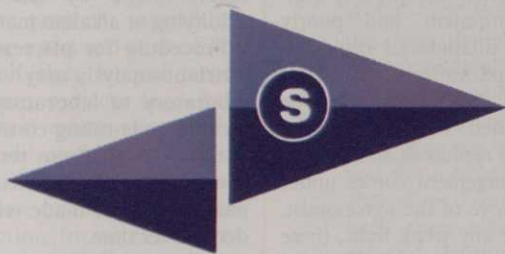
Further washing removes all traces of acid and the sand is then pumped to a screening plant, which grades it into hoppers. A final control procedure then dictates whether it can be moved to the stockpile or if further reprocessing is needed.

Not all sand produced at Moneystone is destined for use on golf courses, though it is a safe bet to say that a large percentage is produced specifically for Hepworth's authorised distributors, Martin Bros., with golf in mind – with such ideal characteristics, this is not surprising. What then are these characteristics?

The grain size lies mainly between 0.125mm and 1.0mm, a size which satisfies the recom-

mendations as a bunker sand for inland courses and complies with the acceptable limits as defined by the STRI. Grain shape is angular, thus providing a good 'lie' and a stable firm surface which prevents 'plugging' whilst providing a good stacking angle at the bunker face – in addition, the sand has excellent resistance to windblow. Free from 'fines' the sand provides good natural free drainage which prevents 'ponding'. Always an added attraction, it has a light colour which highlights green surrounds, making the bunker visible from a distance. Finally, an important point, the sand has no shell or free lime content and will not contribute to turf disease when splashed from the bunker onto playing surfaces.

If there was a lesson to be learned from my visit to Oakamoor, it was that all bunkers sands are certainly not the same – one has only to look at some of the awful stuff used because it just happened to be cheap to realise that in sand selection, just in every other facet of good greenkeeping husbandry, you pay your money and takes your choice. The wise greenkeeper should take into consideration the consistency he seeks at his particular location, weigh the pro's and con's carefully, and remember always that there is no substitute for quality!



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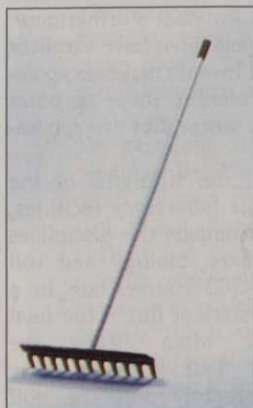
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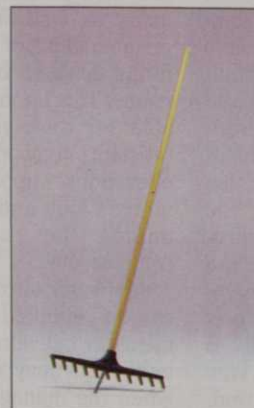
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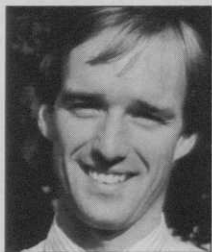
- 11600 Complete rake w/Yellow Wood Handle: £4.61 each plus VAT in packs of 12**

HOW AN ADVISOR CAN

Preconceived ideas are often held about golf course agronomists. To dispel some of the popular misconceptions, STRI golf course consultants are not substitute greenkeepers (the day to day running of the course, we believe, should be left firmly in the hands of the head greenkeeper or course manager), nor are they simply idealistic botanists, but provide a realistic approach to course management and tailor recommendations to requirements of individual courses.

The first approach to the STRI from a golf club is either in response to a short term problem or when there has been progressive deterioration in playing surfaces. The solution may be quite simple but the remedy can be complex and involve a long term prescription, therefore early advice should be sought. Thorough analysis of turf and sub-surface conditions may also reveal potential problems for the future unless pro-active management strategies are adopted which do not simply paper over the cracks. Under these circumstances the primary role of the agronomist is one of co-ordinator, ensuring that all elements of management are in place to sustain the required level of improvement.

Lack of continuity between green committees can severely hamper progress, as long term objectives become obscured or over-ridden in the interests of leaving a mark in the short term. Committees are essentially made up of golfers of a range of proficiency, drawn from various professional backgrounds. They cannot be fully versed in all the subtleties of golf course management and there may be friction with green staff when green committee members assume the role of course manager. While enlightened, streamlined committees do exist, pressures to preserve artificially lush, green, so-called holding, playing surfaces may be too great to resist despite the inevitable consequences of atrocious winter golf, prolonged use of temporary greens and excessive fertiliser/fungicide bills. To prevent this, clear direction is required from an agronomist who has no commercial axe to grind, one who can assess the situation



STRI agronomists provide an unbiased assessment to realise a golf course's potential, reports JONATHAN TUCKER

objectively without being drawn into club politics.

Ideally, clubs need to formulate their own golf course policy document to avoid the constant changing of priorities and management direction which can often accompany new green committee personnel. The agronomist has an important input into the document, identifying roles and responsibilities, formulating policies and principles which must be kept in place to achieve stated objectives, and prescribing resource needs (manpower, materials and machinery). Construction projects must be phased according to priority, perhaps over several years. The agronomist can identify the best materials and methods for individual projects, thereby avoiding expensive failures and increased course disruption.

Education is a fundamental issue and the agronomist can convey the essential messages via the green committee or to a wider audience at an open forum. Course inspections are followed up with a detailed report and this acts as a powerful 'selling document' as well as informing the membership of progress and future demands of course maintenance. This information is invaluable for diffusing some of the resistance to potentially disruptive operations, supporting the committee's long term aims and minimising the risk of creeping complacency.

Frequency of course inspections can be modified to the requirements of individual clubs. Annual inspections may well be adequate when the management structure is sound and progress is assured,

but there is also the option of biannual or possibly quarterly visits to monitor the situation more closely and to help and support the green staff. The STRI's golf course consultancy team can advise on all aspects of turf management, including basic agronomy and course management, land drainage, construction projects, architecture and design, staffing, mechanisation, etc. Ecology and conservation management is now an integral part of many golf courses to enhance both playing interest and aesthetic qualities. This service should not be confused with those misguided preservationists who regard all trees as sacrosanct, even when misplaced or totally foreign.

Efficiency is often the key to successful course management, particularly against the background of greater expectations for satisfactory playing surfaces year round, allied to the inexorable increase in demand. Green staff lumbered with antiquated, ineffective equipment and poorly housed in dilapidated buildings cannot hope to perform effectively and motivation can be quickly eroded. Therefore, assessment of the resources allocated to course management comes under the critical eye of the agronomist. If there are any weak links, these will be immediately identified and appropriate recommendations issued.

The essential principles of greenkeeping have remained unchanged since the turn of the century, though innovations and equipment are constantly being introduced which may well assist the green staff. Gimmicks can be quickly weeded out by the experienced agronomist and common mistakes avoided. Furthermore, greenkeepers often have excellent ideas and I would make no apologies for relating these to other golf clubs where they are applicable.

One of the strengths of the STRI is its laboratory facilities, which encompass the disciplines of chemistry, biology and soil physics. Golf courses are in a constant state of flux – the final arbitrator often being the weather. Turf diseases may develop rapidly and the golf course manager must therefore

react quickly. The biology laboratory at the STRI provides information on disease identity and advice on suitable fungicides for treatment (in addition to sound cultural practices) as part of an integrated control strategy.

Chemical analysis of soil is useful as a back-up to visual assessment of turf condition. Contrary to the belief held in some quarters, it is not employed alone for the purpose of justifying phosphate or potassium input but to assess underlying trends. Where there are no perceptible adverse effects on the desirable turf-grasses/playing surface qualities, even from low levels of phosphate or potash, then application of these nutrients is not recommended by the STRI.

The fescue/bent grasses (which we aim to nurture) can thrive over a wide range of acidity/alkalinity from acid moorland to alkaline links. But pH analysis in the laboratory can expose fluctuations and if necessary adjustments made by the use of acidifying or alkaline materials.

Procedure for pH testing and nutrient analysis may vary from laboratory to laboratory, therefore the over-riding consideration is to carry out these tests under consistent conditions so that comparisons can be made with confidence over time.

Elements such as copper, zinc, manganese, nickel and cadmium can pose toxicity problems if present at high concentration, therefore analysis will pin-point these toxic elements in contaminated soils. Salt damage is a potential threat on coastal sites and although some turfgrasses have a greater tolerance than others, prolonged exposure and sudden inundation with sea-water will cause turf loss. Tests for the concentration of salt, which rely on measurement of electrical conductivity in a representative soil extract, will help to indicate when it is safe to overseed.

Physical analysis of soils is particularly important in relation to new constructions or possibly when vetting top dressing materials for suitability. For new golf greens certain design criteria need to be satisfied, therefore the proportion of sand to silt and clay (i.e. texture) can be ascertained by particle size analysis. The soil

HELP

material is first dispersed before passing the liquid through sieves of varying mesh size. The silt and clay fractions not retained by the sieves are measured separately by mixing with water and measuring the quantities which have settled after a set time. The organic matter content of the soil is determined by igniting a soil sample and measuring the loss in weight.

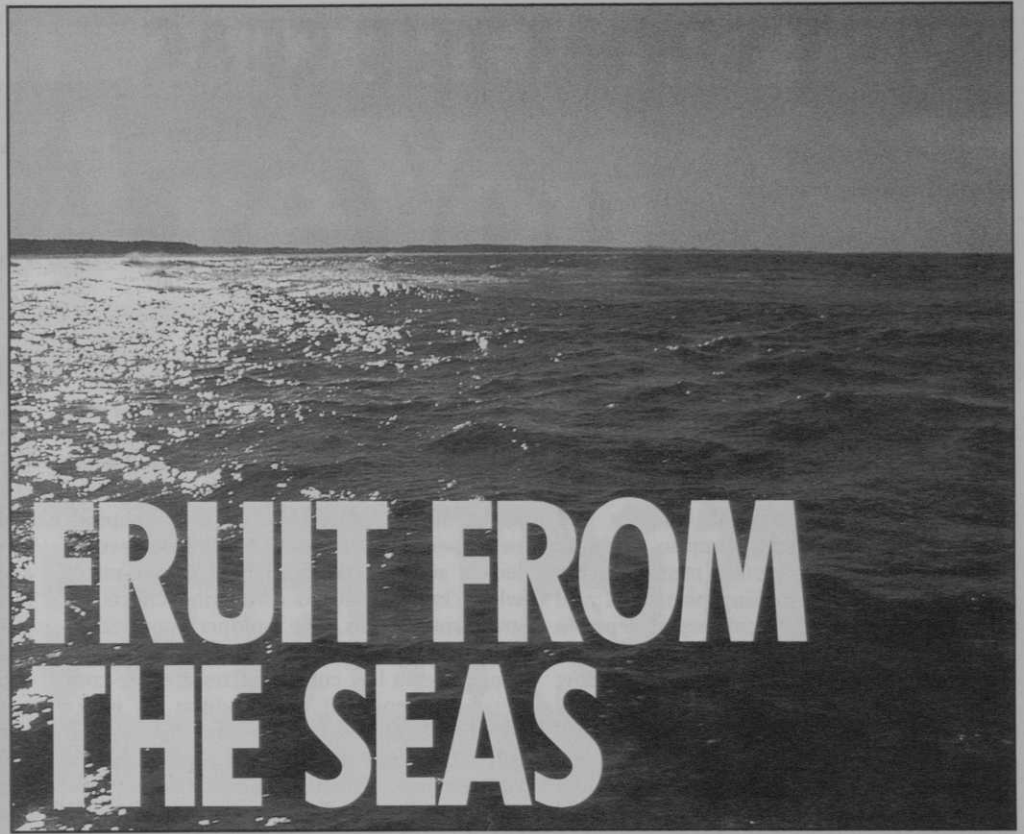
Sands can be tested to assess their compatibility with the soil and to derive a suitable mixing ratio. Hydraulic conductivity tests will provide some indication of the performance of the rootzone mixture in the field. Measurements are made by determining the rate at which water descends through a column of soil.

Again, physical testing of this nature is not intended as a substitute for the hand and eye of the agronomist, but it does provide objective information to support initial impressions.

New tee and green constructions can fail simply because an inappropriate turf is employed. For minor projects, samples of turf can be examined at the STRI or the golf club, but for larger construction projects (e.g. new golf courses) examination of the mature, cultivated turf at point of harvest will facilitate quality control. Where seeding is the preferred option for establishment purposes, the extensive cultivar testing programme at the Institute evaluates the suitability of different cultivars for specific purposes. The ranking of these cultivars enables choices to be made based on which criteria are most important.

In summary, the role of the STRI golf course agronomist is to provide a totally unbiased, objective assessment of all the conditions needed to realise the potential of the golf course. His support of the green staff should be unquestioned and if necessary the frequency of visits can be adjusted to meet the demands of particular courses. Unfortunately, there are no quick fixes in golf course management, therefore I would urge golf clubs to establish sound policies from the outset rather than accepting sub-standard golf for six months of the year!

● The author, Jonathan Tucker, is a consultant agronomist with the STRI.



It's time to unravel the mysteries surrounding 'stimulating seaweed,' reckons MIKE SAULL

Seaweed extracts have long been labelled as 'muck and mystery' products. And up until recently, greenkeepers fell into one of two categories – enthusiastic disciples or downright sceptics. Now though, the tide has changed, and far from being left washed up on the shoreline, extracts are being added into spray programmes on an increasing number of courses.

So what has brought about the change of heart and the increasing number of converts? Well, it appears as if some manufacturers are now able to back their claims with positive independent research. Furthermore, seaweed extracts suit the growing move away from completely inorganic based fertiliser programmes. Finally with increased pressure on turf from drought and numbers of golfers, greenkeepers recognise they need a fundamental rethink of how sprays can manipulate grass growth and in particular rooting. Seaweed extracts in their view are useful plant growth stimulants and not necessarily fertilisers. The move however is made at a time when scientists remain divided over the potential role of seaweed extracts on turf.

Most seaweed extracts (and for that matter granular meals) are derived from marine brown algae, usually *Ascophyllum nodosum*. The foliar applied products available are either true extracts or suspensions of finely divided algae. For example, Maxicrop, SM3, Marinure and Seamac, are produced by either a water extraction or by use of an aqueous alkali hydrolysis process. Others such as Kelpak and Goemar are suspensions.

There is a growing number who feel that the organic component of seaweed extracts is having a very real positive effect on stimulating plant growth. This is separate from and in addition to the valuable effects of added fertilisers in seaweed mixes. Claims surrounding the use of this base material include better rooting and tillering,

increased resistance to stress conditions, reduced incidence of fungal attack and improved seed germination.

In the past it was felt that the effects of this seaweed extract could be explained by the content of trace elements. However, the quantities of dissolved solids in unformulated extracts that would be applied annually to turf are very small, and researchers have now shown that the trace elements present in seaweed extracts form an insignificant proportion of annual turf requirements.

Because of the small amount of material applied per hectare, the substances in seaweed which produce the beneficial results must be active at very low concentrations. Now, scientists at two of the UK's leading fundamental research centres are homing in on the organic constituents of the one major extract. "Cytokinins are growth stimulants naturally produced at the growing tips of plants," says Prof Gerald Blunden at the University of Portsmouth. "Amongst other activities, they can stimulate cell division and photosynthesis."

Evidence suggests that these compounds can increase major plant nutrient uptake with reports of increases in nitrogen, phosphorous, potassium, calcium, manganese, magnesium, iron and zinc being cited in the literature.

Many researchers have noted cytokinin-like activity when seaweed extracts have been applied in field trials. However, it seems likely that other compounds will also have a role to play. Because of the differences in cytokinin levels recorded for the same seaweed extract using different bioassay procedures, it could be that the extracts might contain other compounds which behave like cytokinins.

Betaines are one possible group of compounds and *Ascophyllum* is known to yield two → 46

FRUIT FROM THE SEAS

45 → different types. They are found within the plant cell and active over the growing season.

The Portsmouth University researchers claim to have made a major breakthrough which confirms the cytokinin like effect of the betaines in certain circumstances. They found that low concentrations of betaines can increase plant chlorophyll by up to 400%. In field conditions this could mean quicker growth and greener looking plants. "It also probably explains why greenkeepers report a greening of grass after spraying extracts. This is a very major advance in our understanding of how extracts can work, though not all extracts are likely to work in the same way," says Prof Blunden.

At the University College of Wales, the research team led by Dr John Norrington-Davies has been looking at the effects of the same extract on root and shoot growth. They have now been able to confirm the effects first recorded on barley in experiments with ryegrass. In a controlled hydroponic environment, the researchers found that commercial rates of the base extract trebled the weight of grass roots over the five week duration of the experiment. In addition, the grass produced 50% more leaf area, while shoot dry weight increased by nearly 200%. Even at low concentrations – 1.0ml/litre, the extract improved tillering after just two weeks – an effect which lasted right throughout the experiment.

The research workers are now trying to isolate the various organic compounds found within the extract to determine what their specific role is on plant growth. "We do need further research before we can be more specific" says Dr John Norrington-Davies. "But it appears as if cytokinins are the most likely key to responses seen. However, they are unlikely to be capable of producing the full responses seen in the field and other compounds such as betaines could also be important. There is an increasing body of information available to show that the use of extracts is beneficial, even though the reasons for the responses are not fully understood," claims Dr Norrington-Davies.

Prof Blunden sends out one word of warning though. "Too frequently, results reported with one product are assumed to apply equally to another even though they may be manufactured in different ways, from different seaweed types, contain different components and are applied in different concentrations. Users should make sure they are convinced that the products they select live up to the manufacturers claims."

One manufacturer claims that the greatest benefit from its products come from their high alginate content. It thus markets its own extracts as soil conditioners. With around five times more alginate than some other products on the market, the company feels that such a compound is the valuable active component.

They suggest that it works by helping to increase soil microbiological activity and improve soil structure and moisture retention.

Dr David Lawson, chemist at the Sports Turf Research Institute, echoes Prof Blunden's warnings. "We've not carried out research on the use of pure seaweed extracts and I'm not aware of any independent work on the products specifically on turf. We have however looked at seaweed extract/cow manure mixes which have produced conflicting effects on grass species mix. The product appeared to increase the fescue content of the turf. However under a low cut height regime, the converse happened. If the products do effect rooting, then does this have an effect on the turf? They also tend to be applied in hot weather and maybe the water is having a beneficial effect. Between the two, I would speculate that it is the seaweed component of the products we have trialled which is probably more beneficial, but it is too early yet to be more specific."

Professor Gerald Blunden: 'Too frequently results reported with one product are assumed to apply equally to another'



At present around 25-30% of the 600 or so Scottish greenkeepers on the books of Edinburgh based Sports Turf Services use seaweed extract on a regular basis. However the company's NE area manager, Mike Dennis confirms that the number of converts is rapidly increasing. "Until recently, greenkeepers have been keen to use inorganics. Now though, we have turned full circle and there is a move back to naturally based organic type products. Many greenkeepers have made the change simply because they feel that the continued use of inorganic fertilisers is perhaps not giving them the best results. Others feel the need to try other products despite the fact that the scientists cannot be more conclusive at present. If organics were more competitively priced, a lot more would make the change," he says.

Seaweed extracts however are a special case. Mr Dennis sees them being used in conjunction with granular or powder fertilisers as a way of feeding grasses and kick-starting turf growth. They are not necessarily fertilisers and most greenkeepers now recognise and appreciate their use as plant growth stimulants.

"In early springs, it is a waste of time using

granular products as any lush early growth is soon killed-off. Here a high iron content seaweed extract can be used to give good early presentation to the greens without producing lush growth. In years when spring arrives late, the product can give us some breathing space without force feeding the stressed turf. Similar approaches can be used at the end of the season to harden-off grasses and perhaps discourage disease. Here it is pointless using more nitrogen just to produce lush, but weak, growth. With most golfers now accustomed to beautifully presented greens, high iron products are also being increasingly used prior to tournaments. The effects can usually be seen within 24 hours and they can last for six weeks or more," says Mike Dennis, continuing, "in this respect high iron type products can hide a multitude of sins, but they cannot be considered a replacement for a proper programme of inputs. They are not long term products and should not be used as such." The other major use for extracts is on newly sown greens – here basic formulations with limited additional NPK should be used to help tillering and increase shoot density. Applications every six weeks can have a dramatic effect.

"The aim on reseed is to give grass its feet," he says. "It is pointless applying heavy doses of fertiliser at this time because the turf won't use it. You wouldn't give solids to a baby, because it couldn't cope with the food. So, why try to force feed new grass with something it can't utilise efficiently? We have seen treated greens that are much better able to cope with drought stress than unsprayed areas on the same course, and this is probably a function of the improved root growth that extracts produce. This drought resistance characteristic lasts for some years, preventing summer discolouration of greens.

The seaweed extract appears to keep grass green for longer periods and helps retain moisture in the leaf. Where greens look run-down, our first approach is to check soil and leaf tissue for potash and magnesium, but extracts can also have a role to play. Formulated products can be used to replace dry fertilisers and with three recent years where drought has been a major threat, we are much more conscious of the role foliar acting liquids can play. And if budgets allow, they make a lot of sense. A number of greenkeepers are now mixing seaweed extract with liquid organics feeds, thus making their own fertiliser cocktail that includes the beneficial effects of seaweed."

"I feel that seaweeds put a lot of natural goodness back into the soil," he continued, "and despite the fact that we do not yet know what the active ingredients are, extracts are rapidly becoming a regular component of our green and tee management programmes."

● The author, Mike Sauli MSc., is past technical secretary of the Soil and Water Management Association. He is also a soil scientist and now runs his own PR business – Landline PR – based in Shrewsbury.

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Around the Green

Keeping in touch with news and comment from the regions

NORTH WEST

June is drawing to an end as I write and the rainy season appears to have finally come to an end. I must admit that this month I am struggling to find something to report, as there seems to be very little happening in the North West. One date for your diary, however, is 25 August, when we have a visit to the GEM fertilizer works at Accrington. Unfortunately we are restricted to just 30 members, so it will have to be a case of first come, first served.

At the regional final of the Hayter Challenge Tournament at Worksop our section had only one qualifier make it forward to the grand final – Chris Hulme. We all wish Chris the best of luck in 'the big one'.

That seems to be it for now, though I am looking forward to The Open and then a few days at the National Tournament, where I hope to meet many section members and renew old acquaintances. Any news or views, please contact me on 051 724 5412.



BERT CROSS

SCOTTISH REGION

The Scottish Region National Tournament was held at Brunston Castle GC, Ayrshire, on 22 June, staged on a new course which has been open for only one year, though every player was fulsome in their praise for its condition. Congratulations and thanks to Gordon Heron and his staff and also to George and Anna Ferguson and their clubhouse staff for their kindness and hospitality – especially the catering organisation, who did wonders despite limited catering facilities. Our special thanks also to Mr Bob Low, owner of Brunston Castle, for his kindness in granting us courtesy of the course. Although he could not be with us in person he did not forget us and a 'phone call from Belgium came to wish us well – and to offer everyone in the club a drink, which added the final flourish to a great tournament and a fine course, one that will become even better as the years progress. Our best wishes, then, to everyone at Brunston Castle for every success in the future.

No less than 92 people attended, of whom 80 were players, and as will be seen by the scores, they found it a very tough course indeed. As usual, competitors were far flung, from Tain in the north to Goswick in the south (or should I say north of England?). Some people, including our intrepid editor, had a slow journey but still they come back – year after year. In mentioning the editor, does he realise that nearly every bad score was put down to the appearance of his camera on the 17th tee? Well, someone has to take the blame!

It was a bonus for us that BIGGA chairman John Crawford was with us to present the trophies, and it was nice also to see young Gordon Irving back in the promised land – popping along to see some old friends. A special thanks to Jim Paton, Willie Blair and Jimmy Neilson for their assistance – we worked Jim Paton so

hard that the poor fellow wasn't fit enough to walk round the course and was forced to take a buggy (auld age disnae come itsel' Jim), – nice drive at the first, though!

ELLIOTT SMALL

• *The full results of the Scottish Championship appear on Page 7, together with photographs of the major trophy winners – editor.*

KENT

Not much to report this time around, except perhaps to remind you of some of our events later in the year. Perhaps the most important will be our hosting of the Regional Seminar at Hadlow College on 27 October. The topic for our half dozen expert speakers will be the implications and practicalities of golf 365 days a year. The final line-up of speakers has yet to be finalised, but we intend to make it a topical, interesting, educational, and perhaps even stimulating day of discussion for greenkeepers, secretaries and golf club officials.

On the golfing front we have our Autumn Tournament at Langley Park on 15 September. Also to be pencilled in is our Christmas Turkey Trot, which may be staged at Darenth Valley.

At least one definite piece of news is that Andy Johnson, head man at Sene Valley, is once again a married man. This report will undoubtedly appear some time after the ceremony in May, so I deliberately omit the word 'happily'. Only kidding, of course, for where would we greenkeepers be without 'er indoors'? I have found they can also come in very handy as makeshift green staff and I remember a couple of years ago (at seven months pregnant) my wife was painting tee markers in the shed. I also know of one head greenkeeper who was known to send his wife out to switch the dew from the greens and move the tee markers at weekends – unpaid or course – when he was short of staff to cover! She was also a dab hand at bunker raking. Well, there we are Andy, a few useful tips for a happy and fruitful marriage. Oh yes, and when she has finished those chores out on the course don't forget she has also to wash your overalls and make the dinner. I think I had better shut up now, in case my wife reads this!



PAUL COPSEY



Bill Francis

SOUTH EAST REGION

Bright sunshine together with a refreshing north easterly breeze greeted the competitors of the South East region on 29 June, bent on qualifying to represent the region in the Hayter Challenge Tournament finals to be staged at Sand Moor in September. For this regional qualifier we were fortunate in having the new Weald of Kent

course at our disposal, and after a filling buffet lunch the competitors set out to try and master the terrain, truly in excellent condition when one considers that it has been open for just one year.

Thanks must be extended to John Millen for helping to arrange the tournament; and to all the staff at Weald of Kent for their unfailing courtesy and professionalism. Thanks also to Hayters plc for their help and generous sponsorship of the day, which must be voted a great success.

RESULTS 0-9 handicap 1st W Francis 76-5=71. 2nd H Morgan 80-8=72. 3rd M Smith 78-5=73 (countback). Reserve M Sherris 80-7=73. 10-18 handicap 1st P Preston 87-18=69. 2nd G Kyle 81-10=71 (countback). 3rd D Keen 83-12=71. Reserve C Reed 83-10=73. 19-28 Handicap 1st J Roberts 94-24=70 (countback) 2nd C Forde 90-20=70. 3rd S Millard 90-19=71. Reserve D Sullivan 96-24=72.

Good fortune to all qualifiers at the National Finals at Sand Moor.
DAVID WOOD

SOUTH WALES

The Hayter Challenge regional final held at Clevedon GC on 8 June was played on a glorious day, the weather being warm and wind free, in fact perfect golfing weather. Before the competition I rather fancied our chances, as some good scores had been registered at section monthly meetings and most of the lads were playing consistently well. So what went wrong? The only player from our section to qualify for the final was Laurence Walter of Wenvoe Castle GC. Two other competitors came away with something: 'yours truly' as mug of category two and Philip Huish as mug of category three! Just in case he forgets to mention it in his column, Richard Whyman (Devon & Cornwall) won the mug of category one! Our thanks to Hayters, especially Kim Macfie and Robin Boyes, for their splendid support and for presenting a magnificent prize table, also to all at Clevedon GC for their hospitality and to Barry Reeves and his staff for course presentation. Last but not least, our thanks to Marion and Gordon Child for their hard work and splendid organisation.

Dennis Archer is recovering from an operation in which he has had a leg amputated and I'm sure everyone will join with me in wishing Dennis the very best of good luck. Our thoughts are with you Dennis, and we all hope that everything turns out well.

Andrew Jenkins has yet to open the bottle of bubbly he won in Westurf, for he is (or was, at the time of writing) still waiting to become a father. Any news for the summer newsletter will be greatly appreciated. Contact me on 0792 233923.



PETER LACEY

NORTH WALES

June has been a quiet month in North Wales, so there is little to report save that of Chris Davies

(Abergele GC) moving house. All the staff wish him well in his new home and Chris, don't forget your socks, the new owners will not want to pay for a fumigation expert to clear them up!

Dates for your diary: on 29 or 30 September (if enough people show interest), a coach will be travelling to the Haydock Park Show. If you are interested please contact either Terry Adamson or me. On 6 October our Autumn Golf Tournament will be held at Pwllheli GC. When the entry forms come out make sure they are sent back A.S.A.P., along with the entrance fee, as forms returned after the closing date will not be accepted.



Finally, if any members are interested in attending a first aid course at Northop College during the winter, please contact me.

DAVID PROCTOR

NORTHERN

Our Presidents Day Tournament was held at South Leeds GC on 10 June, by kind permission of the management committee. The course was in fine condition, reflecting all the hard work put in by Graham Hope and his staff. Thanks must also go to Mr. Terry Hughes, Captain of the Rabbits, for presenting the prizes, and to the bar and catering staff for an admirable job.

The results:- Division 1 - Jubilee Cup D. Spurden, 1st S. Midgley, 2nd D. Collins, 3rd R. Johnson. Division 2 - 1st G. Hope, 2nd A. Smith, 3rd L. Kirkbright.

Our grateful thanks - as always - go to our president, Bill Mountain, (who by the way is in his 33rd year of office) for putting on such a splendid prize table, and last but not least our thanks to our friend Mel Guy for being the president's right hand man on the day, arranging all the score cards etc. Everyone had a grand time.

The Invitation Day at Pannal GC on 17 August is fully booked and no further entries can be taken. There are, however, still a few places for the Autumn Tournament at Kirkby-moorside GC on 6 October. Any member wishing



to book should send a deposit of £10 to me at 49 Cornwall Road, Bingley, W Yorks. BD16 4RL, or call me on 0274 568128 for further details.

PAT MURPHY

DEVON & CORNWALL

With the sun shining for the first time in weeks, our sectional qualifiers travelled to the Hayter Challenge regional final held at Clevedon GC on Tuesday 8 June. The Hayter agents for the section, Devon Garden Machinery and Hennings Ltd., kindly sponsored mini bus travel to the final and Alan Dommett of DGM drove the Devon qualifiers, though Martin Hennings unfortunately was unable to attend, due to his company's involvement with the Cornwall County show, which started only days later. With this, the Cornish qualifiers nominated Dick Parr to drive their bus and though perhaps it would be better to draw a veil over the trip, I understand that many now regard it as the journey of a lifetime! As to the event, our qualifiers had both good and bad fortune, with 'yours truly' collecting the mug of the category, although I wasn't the only section secretary so to do.

Our congratulations to Lauchlan Millar, who returned a nett 69 to win the 0-9 category, also to Brian Ridgeway (73) & Neil Macintyre (72) in finishing third in their categories - we wish them well in the National final. With the help of these players the section won the team prize for the second time in three years, so congratulations are in order to all team members who took part. In closing, I would like to thank Hayters for sponsoring this superb event, also



Gordon & Marion Child, who as usual ran the day so smoothly.

RICHARD WHYMAN

CLEVELAND

Two of our members have qualified for the Hayter Challenge final at Sand Moor GC, Graham Pyle and Chris Powley - congratulations and good luck to them.

Whilst driving a Greens King on a gravel path, Ian Holloran found two golfers blocking his path and he was forced to brake hard. As he was on a side-sloping path he slid broadside into a beck, causing minor damage to the machine. Fortunately he was unhurt.

On heavy land, temporary winter greens offer the advantage of protecting normal greens during the worst of winter, so that from springtime onward the finer grasses are in better condition and are better able to provide good putting surfaces. It is important at this time of year to make provisions to harden off the greens and have stocks of fungicide available in case of fungal attack. Scarifying, aerating and drying off by reducing irrigation application during September will help enormously.

The new course at Yafforth, Northallerton, opened in July, whilst the new course at Brotton, near Saltburn, according to head greenkeeper Brian Hall, is now fully operational and 'doing well'. Darlington Borough Council's course at Stressholme is to add an ambitious driving range to complement the popular 18 hole course, whilst Jim Webster (head greenkeeper) advises that he is busy setting up a nine hole course, complete with driving range, at the Hallgarth Hotel complex near Darlington.



BRUCE BURNELL

LONDON

Congratulations to Pat and Tina Swinn on the recent arrival of their new son, Sean Francis. We wish them all the best and hope they don't have too many sleepless nights. Congratulations are also in order following the triumphant win of Doug Smith and John Jackson at the recent guest day event held at Thorpe Hall GC. Although staged on Doug's home territory, this win amongst the members must surely be all the more satisfying, whilst the rock solid performance of John, as always, was impressive.

The summer league is progressing towards an interesting climax and the final rounds certainly promise to be entertaining. I will keep readers informed when the final stage results come to hand. The winter seminar venue has been decided, with Oaklands College kindly offering us some dates in early December. A programme is currently being drawn up. Keep the news coming in, all ideas are welcome. Don't hesitate to call me on 081 959 5629.



TONY DUNSTAN

SURREY

The sun always seems to shine on Cresta Cup day and this year was no exception as players sweltered on the course at West Surrey GC. Despite the heat Simon Kirkham returned a remarkable score of 41 Stableford points off a handicap of eight. RESULTS: 1st D Kirkham 41. 2nd D Sullivan 40. 3rd G Holland 38. Trade 1st D Wall 34.

Thanks went to the club for allowing us courtesy of the course and to Mike Kirkham and his staff for the good playing conditions. Other people deserving of mention are chairman Terry Huntly and secretary Derek Walder who, I

know, spend much of their own time organising our golf days - always well run, enjoyable events. With this in mind, I would again like to tackle the old problem of late entries.....and if you are getting fed up with reading about this matter then maybe it is starting to sink in!

Every member has received entry forms for our next three events, forms which clearly indicate the closing date for entries. Therefore, Derek should not have to cope with 'phone calls two or three days prior to golf days from members who want to play. Forthcoming golf fixtures are the McMillan Tankard at Sunningdale on 12 August, the Parker's Salver at the Drift GC on 8 September, and the Autumn Tournament at Epsom GC on 21 October.

Finally, if any greenkeeper can offer their club as a section event venue would they please contact Derek. It is nice to vary the venues we visit each season.

ROGER TYDEMAN

EAST OF ENGLAND

A beautiful mid-May afternoon provided ideal golfing conditions at Belton Park GC, Grantham, the venue for the Purdey's Grass Machinery Summer Trophy, played on a course presented in excellent condition by ex-section secretary Colin Swingler and his staff. Thanks must go to Purdey's, our main sponsor, and to all other sponsors for their generosity.

RESULTS: 1st C A MacDonald 74-4=70. 2nd D Griffin 97-26=71. 3rd M Key 97-24=73. 4th D Hornsey 85-11=74. 5th C Swingler 83-7=76.

The next section event will be the Autumn Golf Tournament at Kenwick Park GC, Louth, Lincs., sponsored by Rigby Taylor, on Wednesday 24 August.

Congratulations are in order to greenkeepers from Thorpe Wood GC, Peterborough. First, Graeme MacDonald has been nominated by Askham Bryan College for the TORO-PGA European Tour Student Greenkeeper of the Year. Second, superintendent Dave Walden won the recent Rhone Poulenc competition featured in The Groundsman magazine. He has now returned from a whistle-stop tour of France.

Finally, if you have any news, views or problems that you would care to see aired (in this publication), please contact me.

MICHAEL FINNEY

MIDLANDS

It is with deep regret that I inform members of the sudden death of Jeff Smith, whose career spanned some 25 years at Walmley Golf Club, plus a period of time spent at Blackwell Golf Club. Jeff, always a keen supporter of BIGGA, will be sorely missed and our thoughts at this sad time are especially with his three daughters.

On 17 June we played our Summer Tournament at Kidderminster GC. The course played long after the recent wet period and with growth at a peak this made for tough scoring. Mike Hughes was not to be put off though, for he won both gross and nett prizes, his nett score being 107 over 27 holes. The Trade Prize was again well contested, with Ivan Toon eventually coming in the winner. We would like to thank everyone for supporting our tournament, in particular the many trade reps who support our section so well. Thanks also are due to Kidderminster GC for allowing us the use of their facilities and for the warm welcome we received, and to Roy and his staff for a well turned-out course prepared during very difficult conditions.

During the evening the section presented Roy (the head greenkeeper at Kidderminster) with a cheque for £150 for his granddaughter, who had recently lost her sight due to an illness. Roy, we hope this gift, raised by our

49 → members on the day, will provide a suitable toy for your granddaughter.

Dates to remember: Autumn Tournament, Copt Heath GC, Monday 9 August – entries closed. Christmas Tournament, Enville GC, Tuesday 7 December – entries close 7 November.



DEAN CLEAVER

BUCKS, BERKS & OXON

Congratulations to Kevin Munt, who won the Parker Harts Summer Tournament at Stoke Poges GC. I know that those present were impressed with the course and we thank Stoke Poges GC for their generosity. In particular, we thank the secretary, steward and catering staff and, of course, Alec Millar and his green staff for producing such excellent playing conditions. Thanks also to Richard Gooding and Parker Harts for their generous support.

Has every BB&O member received this year's fixture card? If you are minus this vital information, call me and I will send one to you straight away. Do you want to try go-karting? Same thing applies, i.e. if you haven't received the information contact me ASAP and I will send etc. etc. – this event is an open invitation and friends and families will be most welcome.



We need your ideas for social events that you would like to see staged next year, also your ideas for the 1994 lecture programme – ring me or write to me with your valued input.

RAY CLARK

NORTH SCOTLAND

Section members may like to tell non-BIGGA members on their staff that half-yearly memberships are now available for a much reduced fee,

Around the Green



making it a great opportunity to join the Association for the remainder of 1993. New members this month are Andrew Bain from Inverness and one of my assistants, John Urquhart, who rejoins after a couple of years away.

Seven hardy souls made the long trek to Ayrshire for the Scottish Greenkeeping Championships at Brunston Castle, and it is good to report that Caird Park's Paul Murphy picked up the major trophy for the best scratch score. It was certainly worth the journey as Brunston is a superb course and was in great condition, especially as it had only been open for a year. We had good weather, a great time, a big entry, and many old friendships were renewed. The North section is due to hold this competition in 1995, so anyone who would like to put their course forward, please 'phone me and the committee will discuss it at the next meeting.

New member Colin Forbes of Aboyne was fairly burning it up in a competition at Braemar recently. He raced to the turn in 29 and came home in 32 for a three under standard scratch 61 which equals the course record. I wonder if Colin will be at Kirriemuir next month to challenge the scratch boys.

We wish Hughie McLatchie all the best as North representative in this year's JCI Premier Greenkeeper of the Year competition. Fine recognition for the work he has done at Peter-

head, which is in fine condition. Hugh has contributed a couple of items this month, first to wish Kevin Peace all the best in his new job as head greenkeeper at Inverurie. A sad loss to Peterhead, but maybe Hugh's new deputy will be able to keep up with him at the bar. His second bit of information concerns another of his staff, Aileen Snowden. She started on the course 18 months ago and has been attending Elmwood College, where she is making good progress. Hugh says she is turning out to be a good apprentice on the course, is a good worker and gets on well with the rest of the staff and members of the club. He advises other greenkeepers not to be frightened of employing female staff.

I recently went to see Alick Mackay at Skibo to see how the new golf course is progressing. Greens and tees are currently being turfed and fairways seeded. All the bunkers are in place and look superb. They have been constructed, using the traditional revetting method, by Alick and his staff. I look forward to seeing the finished article and hopefully playing it in the future. It will be the sort of course where if the golf is bad there is always the views across the loch or west to the hills, a perfect setting for a golf course, with much wildlife as well.



IAIN MACLEOD

AYRSHIRE

Highlight in June was the Scottish National Tournament held in our area at Brunston Castle, near Girvan. Brunston Castle is a new course designed by Donald Steel and is well set to complement the existing first class golfing facilities in Ayrshire. Although open for less than a year the course was in excellent condition, the fairways in particular → 62

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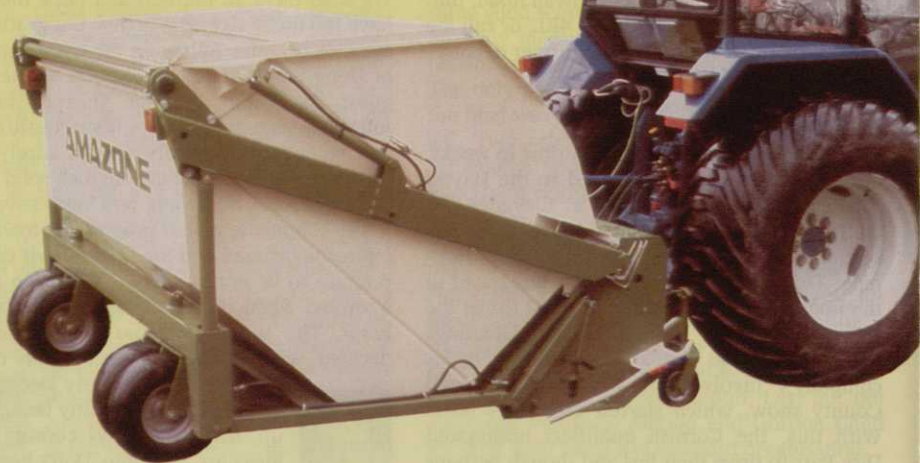
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